October 2003

Dustpan Maintenance Dredging Operations for Marsh Creation in the Mississippi River Delta Demonstration (MR-10)

Project Status

Approved Date: 1997
Cost: $1.6 million
Project Area: N/A
Status: Completed June 2002
Net Benefit After 20 Years: N/A
Project Type: Demonstration: Marsh Creation

Location

The project is located in Plaquemines Parish, Louisiana, in the Mississippi River Modern Delta. Dredging took place near Cubit's Gap, Head of Passes, and Southwest Pass.

Problems

Hopper dredges must dispose of their material in deep water, making the spoil material unavailable for direct marsh creation, although the material may still provide nourishment for the system. In comparison to hopper dredges, spoil from dustpan and cutterhead dredges can be disposed of in shallow, open waters for marsh creation.

Restoration Strategy

This project demonstrated the use of dredge material from routine maintenance of the Mississippi River Navigation Channel by using a dustpan hydraulic dredge to create and restore adjacent marsh. Approximately 40 acres of deteriorated marsh that had converted to shallow open water was restored with approximately 222,000 cubic yards of dredge material over the course of 8 days or 192 operating hours with the expectation of an increase in marsh.

Progress to Date

The demonstration was completed in June 2002.

This project is on Priority Project List 6.

View of marsh creation area during placement of dredged material.

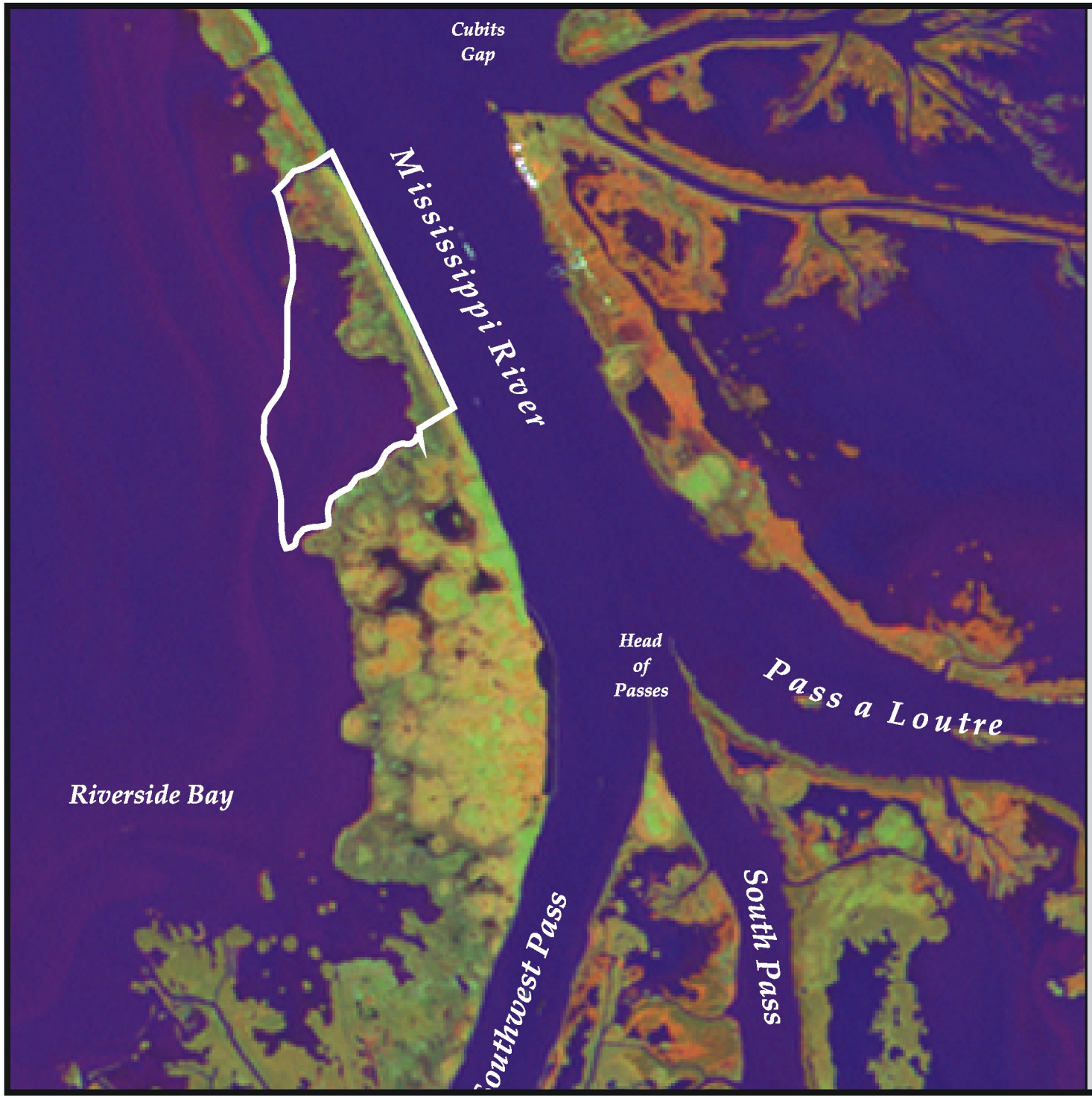
One year following project completion, grass has successfully colonized the marsh creation area.

For more project information, please contact:

US Army Corps of Engineers
New Orleans District

Federal Sponsor:
U.S. Army Corps of Engineers
New Orleans, LA
(504) 862-1597

Local Sponsor:
Louisiana Department of Natural Resources
Baton Rouge, LA
(225) 342-7308



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Project Boundary

USGS
science for a changing world

N

0.5 0 0.5 1 Miles

0.5 0 0.5 1 Kilometers

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery:
2002 Thematic Mapper Imagery

Map Date: October 16, 2003
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